



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

January 25, 2023

Blake Cowen  
Product Registration Manager  
Albaugh, LLC  
PO Box 2127  
Valdosta, GA 31604

Subject: Registration Review Label Amendments Incorporating Mitigation Measures from the Interim Decisions for Metolachlor and Fomesafen and the National Marine Fisheries Services' (NMFS) Biological Opinion on the Effects of Metolachlor on Pacific Salmonids  
*Product Name:* METOLACHLOR + FOMESAFEN EC  
*EPA Registration Number:* 42750-347  
*Application Dates:* 8/25/2021 and 04/19/2021  
*Decision Numbers:* 583839; 573334 and 589580

Dear Blake Cowen:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Metolachlor and Fomesafen Interim Decisions. The Agency has concluded that your submission is acceptable.

This letter also addresses the label mitigation resulting from the NMFS' Biological Opinion on the effects of Metolachlor on Pacific salmonids. The Agency has concluded that your submission is also acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Srijana Shrestha at [shrestha.srijana@epa.gov](mailto:shrestha.srijana@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington", with a stylized flourish at the end.

Linda Arrington, Branch Chief  
Risk Management and Implementation Branch 4  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

Enclosure: Stamped Label

Fomesafen	Group	14	Herbicide
Metolachlor	Group	15	Herbicide

**METOLACHLOR + FOMESAFEN EC**  
**[Metolachlor + FSN]**  
**[Priority FSN]**

Herbicide: For use in cotton and soybean for control of certain grasses and broadleaf weeds

<b>ACTIVE INGREDIENTS:</b>	<b>% BY WT.</b>
Metolachlor .....	46.26%
Fomesafen .....	10.40%
<b>OTHER INGREDIENTS</b> .....	<b>43.34%</b>
<b>TOTAL:</b> .....	<b>100.00%</b>

Contains 4.22 lb. of metolachlor and 0.95 lb. of fomesafen active ingredient per gallon.  
 Contains petroleum distillates.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION / PRECAUCIÓN**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

<b>FIRST AID</b>	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give <b>any</b> liquid to the person.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>HOT LINE NUMBER:</b> Have the product container or label with you when calling a poison control center or doctor or going for treatment. For 24- Hour Emergency Assistance with spill, leak, fire, exposure or accident call CHEMTREC 1-800-424-9300	
<b>NOTE TO PHYSICIAN:</b> For exposure to eyes, symptomology may include corneal and iris involvement, with full recovery expected. Probable mucosal damage may contraindicate the use of gastric lavage.	

[See inside booklet for additional [complete] [First Aid,] Precautionary Statements and Directions For Use.]

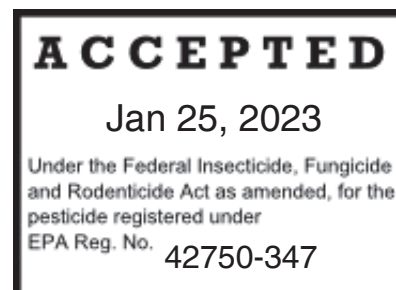
It is illegal to sell, use or distribute METOLACHLOR + FOMESAFEN EC within, or into, Nassau County or Suffolk County, New York.

EPA Reg. No. 42750-347

EPA Est. No. xxxxxx-xx-xxx

**NET CONTENTS:** \_\_\_\_\_ Gallons

**MANUFACTURED BY:**  
 Albaugh, LLC  
 1525 NE 36<sup>th</sup> St  
 Ankeny, IA 50021



**PECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION.** Harmful if swallowed. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Mixers, loaders, applicators and other handlers must wear:

1. Coveralls over short-sleeved shirt and short pants.
2. Chemical-resistant gloves made of barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils , neoprene rubber  $\geq$  14 mils , polyvinyl chloride  $\geq$  14 mils , or Viton  $\geq$  14 mils.
3. Chemical-resistant footwear plus socks
4. Chemical resistant headgear for overhead exposure
5. Protective eyewear (goggles or face shield)
6. Chemical-resistant apron when cleaning equipment, mixing, or loading

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/ maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Mixers and loaders supporting aerial applications are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. When using the closed system, the mixers and loaders PPE requirements may be reduced or modified as specified in the WPS.

**ENGINEERING CONTROLS STATEMENTS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**USER SAFETY RECOMMENDATIONS**

Users Should:

1. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
2. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Remove and wash contaminated clothing before reuse.

**ENVIRONMENTAL HAZARDS**

**NON-TARGET ORGANISM ADVISORY**

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

For Terrestrial Uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Do not apply when weather conditions favor drift from target area.

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

**GROUND WATER ADVISORY**

Fomesafen and metolachlor are known to leach through soil into ground water under certain conditions as a result of label use. These chemicals may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

**SURFACE WATER ADVISORY**

Metolachlor and fomesafen may impact surface water quality due to spray drift and runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having

high potential for reaching surface water via runoff for several months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of metolachlor and fomesafen from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. For more information, see the United States Department of Agriculture National Resource Conservation Service's manual, "Conservation Buffers to Reduce Pesticide Losses."

### PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow contact with oxidizing or reducing agents. Hazardous chemical reaction may occur.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product. This label must be in the possession of the user at the time of pesticide application.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### REPORTING ECOLOGICAL INCIDENTS

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 1 (800)247-8013.

### ENDANGERED SPECIES

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species and certain threatened species, under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult <http://www.epa.gov/espp/>, call 1-844-447-3813, or email [ESPP@epa.gov](mailto:ESPP@epa.gov). You must use the Bulletin valid for the month in which you will apply the product.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

**Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

For early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear:

1. Coveralls over short-sleeved shirt and short pants.
2. Chemical-resistant gloves made of barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, polyvinyl chloride  $\geq$  14 mils, or Viton  $\geq$  14 mils
3. Chemical-resistant footwear plus socks
4. Chemical-resistant headgear for overhead exposures.

**IMPORTANT: FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.**

## MANDATORY SPRAY DRIFT MANAGEMENT

### AERIAL APPLICATIONS:

- **DO NOT** release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S641).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S641).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- If the wind speed is 10 miles per hour or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the wind speed is between 11-15 miles per hour, applicators must use ¾ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply during temperature inversions.

### GROUND BOOM APPLICATIONS:

- User must only apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

### BOOMLESS GROUND APPLICATIONS:

- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.3).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

## SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.  
BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

The applicator should be familiar with and take into account the information covered in the Spray Drift section. To avoid spray drift, do not apply under windy conditions. Avoid spray overlap as crop injury may result.

Where states have more stringent regulations, they must be observed.

### Importance of Droplet Size

- An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

### Controlling Droplet Size- Aircraft

- Adjust Nozzles- Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

### Controlling Droplet Size- Ground Boom

- Volume- Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure- Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.

- **Spray Nozzle-** Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### **RELEASE HEIGHT- Aircraft**

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

### **BOOM HEIGHT- Ground Boom**

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

### **SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing the temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

### **WIND**

Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.** Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

### **BOOMLESS GROUND APPLICATIONS**

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

### **HANDHELD TECHNOLOGY APPLICATIONS**

Take precautions to minimize spray drift.

### **SENSITIVE AREAS**

Apply METOLACHLOR + FOMESAFEN EC when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas). Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

### **CHEMIGATION RESTRICTION**

**DO NOT** apply METOLACHLOR + FOMESAFEN EC through any type of irrigation system.

#### **WEED RESISTANCE MANAGEMENT**

Fomesafen	Group	14	Herbicide
Metolachlor	Group	15	Herbicide

METOLACHLOR + FOMESAFEN EC herbicide contains both a Group 14 herbicide (fomesafen: a protoporphyrinogen oxidase (PPO) inhibitor) and a Group 15 herbicide (metolachlor: a long-chain fatty acid inhibitor). Any weed population may contain or develop plants naturally resistant to Group 14 and/or Group 15 herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of METOLACHLOR + FOMESAFEN EC or other Group 14 and / or Group 15 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weeds(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Fields should be scouted prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective. Fields should be scouted after application to verify that the treatment was effective.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance management and/or integrated weed-management recommendations for specific crops and weed biotypes.

Additional Best Management Practices include:

- Plant into weed-free fields and keep fields as weed-free as possible.
- Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- To the extent possible do not allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and postharvest to prevent a buildup of the weed seed-bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.
- Use a broad-spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed-control program. Do not use more than two applications of this or any other herbicide with the same mechanism of action within a single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control weeds.
- If resistance is suspected, treat weed escapes with an herbicide with a different method of action or use non-chemical methods to remove escapes.

Report any incidence of non-performance of this product against a particular weed species to your Albaugh retailer or representative. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemicals means to remove escapes, as practical, with the goal of preventing further seed production. Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these MOAs have been found in your region. Do not assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are



intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

### PRODUCT INFORMATION

**Mode of Action:** METOLACHLOR + FOMESAFEN EC is a selective herbicide for the control or partial control of certain grass, broadleaf and sedge weeds in cotton and soybeans. It may be applied as a preplant surface, preplant incorporated, or preemergence treatment. METOLACHLOR + FOMESAFEN EC is a mixture of the active ingredients metolachlor and fomesafen. Metolachlor is a biosynthesis inhibitor (Group 15) preventing cell division in emerging weeds. Fomesafen is a protoporphyrinogen oxidase inhibitor (Group 14) leading to cellular membrane disruption and plant death.

**Activation:** METOLACHLOR + FOMESAFEN EC must be activated by a small amount of soil moisture following application. In areas of low rainfall, follow a preemergence application to dry soil with light irrigation of 0.25 to 0.5 inch of water. As with many surface-applied herbicides, weed control and crop tolerance may vary with rainfall and/or soil texture. If rainfall or irrigation within 7 to 10 days does not occur, cultivate uniformly with shallow tilling equipment that will not damage the crop.

**Crop Uses:** METOLACHLOR + FOMESAFEN EC is registered only for use on cotton and soybeans.

**Crop Rotation:** See the Crop Rotation section of this label for specific instructions on crop rotation.

**Precaution:** Crop injury may result if crop rotation guidelines are not followed.

**Replanting:** If replanting is necessary in fields previously treated with METOLACHLOR + FOMESAFEN EC, the field may be replanted to soybeans. During planting, a minimum of tillage is recommended.

**Application Rate Ranges:** Where a rate range is provided within a soil texture or organic matter classification, use a lower rate on soils that are relatively coarse-textured and/or low in organic matter. Use a higher rate on soils that are relatively fine-textured and/or high in organic matter.

### RESTRICTIONS:

- **DO NOT** treat powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface to first be settled by rainfall or irrigation.
- **DO NOT** apply to impervious substrates, such as paved or highly compacted surfaces.
- **DO NOT** use tailwater from the first flood or furrow irrigation of treated fields to treat non- target crops, unless at least 1/2 inch of rainfall has occurred between application and the first irrigation.
- **DO NOT** graze livestock in areas treated with METOLACHLOR + FOMESAFEN EC or harvest treated areas for forage or hay.
- When replanting soybeans in fields that have already been treated, do not apply a second application of METOLACHLOR + FOMESAFEN EC or any product that contains s- metolachlor, fomesafen, or metolachlor as crop injury may occur in harvested soybeans.

### MIXING INSTRUCTIONS AND EQUIPMENT CLEANUP

**Mixing and Loading:** Use care when mixing or loading METOLACHLOR + FOMESAFEN EC allow to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates. Check-valves or antisiphoning devices must be used on all mixing and/or irrigation equipment.

METOLACHLOR + FOMESAFEN EC may not be mixed or loaded within 50 ft. of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. METOLACHLOR + FOMESAFEN EC may not be mixed/loaded or used within 50 ft. of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of METOLACHLOR + FOMESAFEN EC into or from pesticide handling or application equipment or containers within 50 ft. of any well are prohibited, unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-

contained.

The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

#### **Mixing METOLACHLOR + FOMESAFEN EC in Water or In Liquid Fertilizers:**

When mixing METOLACHLOR + FOMESAFEN EC alone, add 1/3 of the required amount of water or fluid fertilizer to the spray or mixing tank. With the agitator running, add METOLACHLOR + FOMESAFEN EC into the spray tank. Continue agitation while adding the remainder of the water or fluid fertilizer. Begin application of the spray solution after METOLACHLOR + FOMESAFEN EC has completely dispersed in the water or fluid fertilizer. Maintain agitation until all of the mixture has been applied.

#### **Tank Mixing:**

If using METOLACHLOR + FOMESAFEN EC in a tank mixture, it is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

When mixing METOLACHLOR + FOMESAFEN EC with tank mixtures, add 1/3 of the required amount of water or fluid fertilizer to the mix tank. Start the agitator running before adding any tank mix partners. In general, tank mix partners should be added in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids such as METOLACHLOR + FOMESAFEN EC, and emulsifiable concentrates.

Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

**Important:** When using METOLACHLOR + FOMESAFEN EC in tank mixtures, all products in water-soluble packaging should be added to the tank and mixed with plain water before any other tank mix partner, including METOLACHLOR + FOMESAFEN EC. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank. Water-soluble packets will not properly dissolve in most spray solutions that contain fluid fertilizers.

#### **RESTRICTION:**

- **DO NOT** exceed the label dosage rate and follow the most restrictive label precautions and limitations.

METOLACHLOR + FOMESAFEN EC is compatible with most common tank mix partners. Test the physical compatibility of METOLACHLOR + FOMESAFEN EC with tank mix partners before use. To determine the physical compatibility of METOLACHLOR + FOMESAFEN EC with other products, use a jar test, as described below.

#### **Compatibility Test**

To ensure compatibility of METOLACHLOR + FOMESAFEN EC with other pesticides, perform a jar test before tank mixing. The following test assumes a spray volume of 25 gallons per acre. For other spray volumes, make appropriate changes in the ingredients.

**Note:** Nitrogen solutions or complete fluid fertilizers may replace all or part of the water in the spray for preplant surface, preplant incorporated, or preemergence applications only. Because liquid fertilizers vary, even within the same analysis, always check compatibility with pesticide(s) before use. Incompatibility of tank mixtures is more common with suspensions of fertilizer and pesticides.

#### **Test Procedure**

1. Add 1.0 pint of carrier (fertilizer or water) to each of 2 one-quart jars with tight lids. Note: Use the same source of water that will be used for the tank mix and conduct the test at the temperature the tank mix will be applied.

2. To one of the jars, add 1/4 teaspoon or 1.2 milliliters of a compatibility agent approved for this use, such as Compex or Unite (1/4 teaspoon is equivalent to 2.0 pints per 100 gallons spray). Shake or stir gently to mix.
3. To both jars, add the appropriate amount of pesticide(s) in their relative proportions based on specified label rates. If more than one pesticide is used, add them separately with dry pesticides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix.
4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15 to 30 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (a) Slurry the dry pesticide(s) in water before addition, or (b) add 1/2 the compatibility agent to the fertilizer or water and the other 1/2 to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is still observed, do not use the mixture.
5. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the Storage and Disposal section of this label.

**Equipment Cleanup:** Before application of METOLACHLOR + FOMESAFEN EC, the spray equipment must be cleaned. Follow the cleanup procedures specified on the labels of the previously applied products. If no clean-up directions are provided, follow the steps provided below for cleaning up after spraying METOLACHLOR + FOMESAFEN EC.

After application of METOLACHLOR + FOMESAFEN EC, equipment cleanup is very important. Because some crops, other than soybeans, are sensitive to low rates of METOLACHLOR + FOMESAFEN EC, special attention must be given to cleaning equipment before spraying a crop other than those registered for use and on this label. Mix only as much spray solution as needed. Immediately after spraying, clean equipment thoroughly using the following procedure:

1. Flush tank, hoses, boom, and nozzles with clean water.
2. Prepare a cleaning solution of one gallon of household ammonia per 50 gallons of water. Many commercial spray tank cleaners may be used as well. Consult your Albaugh representative for a partial listing of approved tank cleaners and more information about proper tank cleaning procedures. Do not use chlorine-based cleaners such as Clorox.
3. When available, use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface. Completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly re-circulate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
4. Flush hoses, spray lines, and nozzles for at least one minute with the cleaning solution.
5. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean water mark. Do not contaminate water when disposing of equipment wash water or rinsate. Do not apply when weather conditions favor drift from target area.
6. Repeat steps 2-5.
7. Remove nozzles, screens, diaphragm check valves and strainers and clean separately in the ammonia cleaning solution after completing the above procedures.
8. Rinse the complete spraying system with clean water.

### APPLICATION INSTRUCTIONS

METOLACHLOR + FOMESAFEN EC may be applied by ground and aerial equipment. As discussed below, use a minimum of 10 gallons per acre of spray mixture for ground application and 5 gallons per acre for aerial application. Prepare no more spray mixture than is needed for the immediate operation. Clean spray equipment is very important so be sure to thoroughly clean before mixing METOLACHLOR + FOMESAFEN EC. Vigorous agitation is necessary to maintain uniformity of the spray mixture. Maintain maximum agitation throughout the spraying operation. Do not allow spray mixture to stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

**Ground Application:** Apply METOLACHLOR + FOMESAFEN EC alone or in tank mixtures by ground equipment in a minimum of 10 gallons spray mixture per acre, unless otherwise specified. Use sprayers that provide accurate and uniform application. Calibrate sprayers often. If METOLACHLOR + FOMESAFEN EC is applied in combination with wettable powder or dry flowable formulations, screens and strainers with a

minimum 50-mesh size.

If METOLACHLOR + FOMESAFEN EC is applied in a band, calculate the amount of herbicide needed for band treatment by the formula below:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \frac{\text{broadcast rate}}{\text{per acre}} = \text{amount needed per acre of field}$$

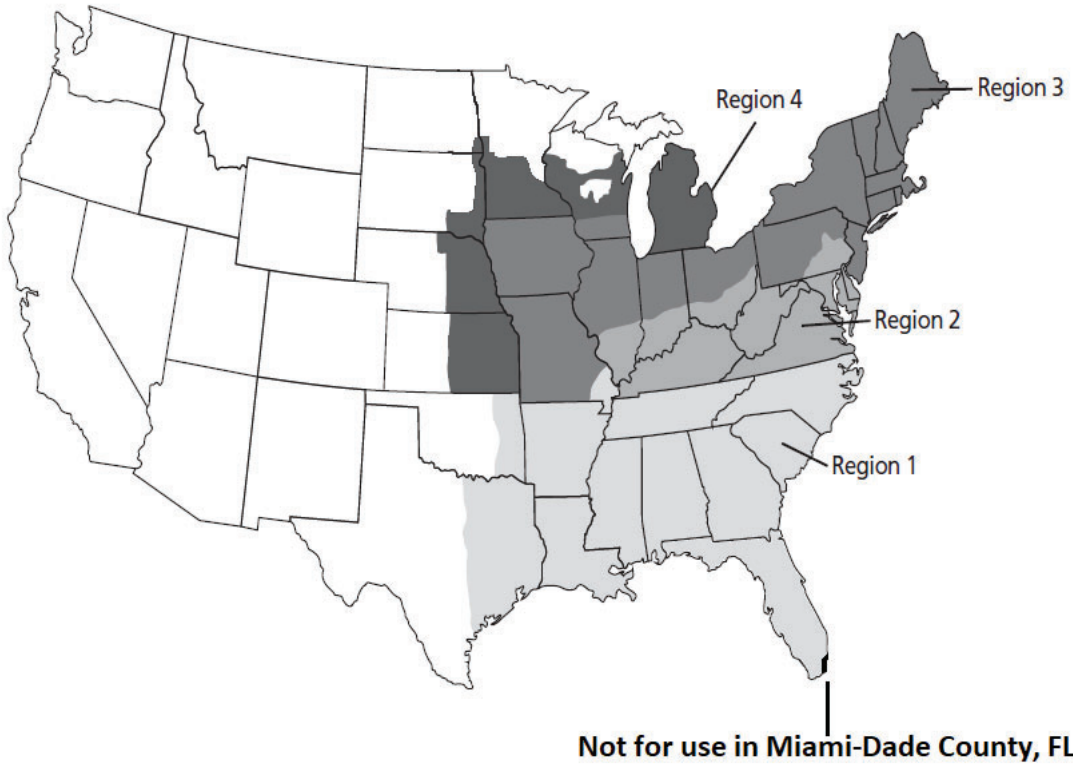
**Aerial Application:** Apply METOLACHLOR + FOMESAFEN EC in water using a minimum of 5 gallons per acre. Avoid application under conditions when uniform coverage cannot be obtained or where excessive spray drift may occur. Make applications at a maximum height of 10 feet above the soybeans with low drift nozzles at a maximum pressure of 40 psi. Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

**WEEDS CONTROLLED OR PARTIALLY CONTROLLED - METOLACHLOR + FOMESAFEN EC** provides control (C) or partial control (PC)<sup>1</sup> of the following weeds when used according to label directions:

ANNUAL GRASSES	BROADLEAVES
Barnyardgrass (C) Crabgrass spp. (C) Crowfootgrass (C) Cupgrass, prairie (C) Cupgrass, southwestern (C) Foxtail spp. (C) Goosegrass (C) Johnsongrass, seedling Panicum, fall (C) Panicum, Texas (PC) Red rice (PC) (C) Signalgrass, broadleaf (C) Sandbur spp. (PC) Shattercane (PC) Witchgrass (C)	Carpetweed (C) Cocklebur, common (PC) Ecliptia (C) Galinsoga spp. (C) Horseweed/marestail (PC) Jimsonweed (PC) Lambsquarters, common (C) Morningglory spp. (PC) Nightshade, eastern black (C) Nighshade, hairy (PC) Pennycress, field (C) Peppyweed, Virginia (C) Pigweed spp. (C) Poinsettia, wild (C) Purslane, common (C) Pusley, Florida (C) Ragweed, common (C) Ragweed, giant (PC) Redweed (C) Sida, prickly/teaweed (PC) Smartweed, ladysthumb (C) Smartweed, Pennsylvania (C) Spurge, spotted (C) Starbur, bristly (C) Sunflower, common (PC) Velvetleaf (PC) Waterhemp spp. (C)  <b>SEDGES</b> Nutsedge, yellow (PC)

<sup>1</sup>Partial control: a visual reduction of weed population as well as a significant loss of vigor; significant activity, but not always commercial weed control.

**METOLACHLOR + FOMESAFEN EC REGIONAL USE MAP**



## REGION 1

Maximum Rate 3 pints(1.58 lb Metolachlor & 0.356 lb Fomesafen a.i.) per acre per year



**REGION 1** - Includes the following states or portion of states where METOLACHLOR + FOMESAFEN EC may be applied: Alabama, Arkansas, Florida (except Miami-Dade County), Georgia, Louisiana, Mississippi, Missouri (counties of Bollinger, Butler, Cape Girardeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne), North Carolina, Oklahoma (East of U.S. Highway 75 and East of Indian Nation Parkway), South Carolina, Tennessee, and Texas (includes area east of U. S. Highway 77 to State Road 239 including all of Calhoun County).

## REGION 2

Maximum Rate 3 pints(1.58 lb Metolachlor & 0.356 lb Fomesafen a.i.) per acre, alternate years



**REGION 2** - Includes the following states or portion of states where METOLACHLOR + FOMESAFEN EC may be applied: Delaware, Kentucky, Maryland, Virginia, West Virginia, South of Interstate 70 in the following states: Illinois, Indiana and Ohio and all areas South of Interstate 80 to the intersection of U.S. Highway 15 and East of U.S. Highway 15 and U.S. Highway 522 in Pennsylvania.

### REGION 3

Maximum Rate 2.5 pints(1.32 lb Metolachlor & 0.3 lb Fomesafen a,i,) per acre, alternate years



**REGION 3** - Includes the following states or portion of states where METOLACHLOR + FOMESAFEN EC may be applied: Connecticut, Iowa, Maine, Massachusetts, Missouri (all counties except for those listed in Region 1), New Hampshire, New Jersey, New York (except Nassau or Suffolk counties), Pennsylvania (all areas except those listed in Region 2), Rhode Island, Vermont and Wisconsin (South of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 between Madison and Milwaukee), and North of Interstate 70 in following states: Indiana, Illinois and Ohio.



#### REGION 4

Maximum Rate 2 pints(1.06 lb Metolachlor & 0.24 lb Fomesafen a.i.) per acre, alternate years



**REGION 4** - Includes the following states or portion of states where METOLACHLOR + FOMESAFEN EC may be applied: Kansas (all counties east of or intersected by U.S. Highway 281), Michigan (Southern Peninsula), Minnesota (all areas South of Interstate 94), Nebraska (all counties east of or intersected by U.S. Highway 281), and Wisconsin (all areas, except those in Region 3, South of Interstate 94 from Minnesota state line to Eau Claire and South of U.S. Highway 29 from Eau Claire to Green Bay plus Door and Kewaunee counties. The following counties are excluded: Clark, Marathon, Wood, Portage, Adams, Shawano, Waupaca, Waushara and Marquette). North Dakota (all areas East of Interstate 29 from Fargo south to the South Dakota state line). South Dakota (all areas East of Interstate 29 from the North Dakota state line to Watertown, all areas east of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U.S. Highway 281 to the Nebraska state line).

South of Interstate 94 from Minnesota state line to Eau Claire and South of U.S. Highway 29 from Eau Claire to Green Bay plus Door and Kewaunee counties. The following counties are excluded: Clark, Marathon, Wood, Portage, Adams, Shawano, Waupaca, Waushara and Marquette). North Dakota (all areas East of Interstate 29 from Fargo south to the South Dakota state line). South Dakota (all areas East of Interstate 29 from the North Dakota state line to Watertown, all areas east of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U.S. Highway 281 to the Nebraska state line).

## COTTON

**Post-Directed Application:** METOLACHLOR + FOMESAFEN EC may be applied to emerged cotton as a post-directed treatment to control or partially control certain emerged broadleaf weeds such as hemp sesbania, waterhemp, pigweed species and morningglory species (See Weeds Controlled or Partially Controlled table for a complete list of weeds). Apply METOLACHLOR + FOMESAFEN EC at 2 to 2.33 pints per acre to weeds having 2 to 4 true leaves using calibrated post-directed, hooded or shielded application equipment. Apply in a minimum of 10 gallons spray solution in order to obtain complete coverage of emerged weeds. Apply METOLACHLOR + FOMESAFEN EC to emerged weeds with a NIS at 0.25 to 0.5% v/v or COC at 1% v/v to if applied alone, or in a tank mix combination with other products that do not contain an adjuvant. METOLACHLOR + FOMESAFEN EC needs moisture activation to be effective so rainfall or irrigation is needed within 7 to 10 days after application to assure best performance.

**Precaution:** Avoid contact to cotton foliage and stems that are not fully barked as unacceptable injury will occur.

**Note:** Cotton foliage is not tolerant to METOLACHLOR + FOMESAFEN EC applications. Calibrate application equipment (spray pressure, nozzle type and configuration, and orifice size) to avoid fine spray droplets contacting green cotton stems and foliage.

**Tank-Mixtures for Post-Directed Application:** METOLACHLOR + FOMESAFEN EC may be applied in combination with other post-directed herbicides labeled for use on cotton to increase the spectrum of weeds controlled. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Herbicide products approved for use in cotton containing active ingredients such as prometryn, DSMA, diuron, trifloxysulfuron-sodium, linuron, MSMA, or glyphosate (for use in glyphosate-tolerant cotton only) tank mixed with METOLACHLOR + FOMESAFEN EC may increase the species of weeds controlled. Refer to the tank-mix partner label for precautionary statements, restrictions, rates and a list of weeds controlled.

**Post-Directed Application Timing in Cotton:** As a post-directed application, METOLACHLOR + FOMESAFEN EC may be applied to cotton at least 6 inches in height through layby.

**Precaution:** Unacceptable injury will occur if care is not taken to avoid METOLACHLOR + FOMESAFEN EC spray contact with any green non-barked parts of the cotton stem or foliage.

### Shielded and Hooded Applications

**Precaution:** To avoid injury, make a precision post-directed METOLACHLOR + FOMESAFEN EC application to the base of the cotton plant avoiding contact with the cotton stem or foliage.

### Layby Applications

Make a post-directed application of METOLACHLOR + FOMESAFEN EC to the base of the cotton plant avoiding contact with any non-barked portion of the cotton plant or foliage. Use precision post-directed equipment or hooded or shielded sprayers on cotton plants that have developed a minimum of 4 inches of brown bark through layby. Configure application equipment to provide full coverage of emerged target weeds.

### RESTRICTIONS:

- Use only hooded or shielded spray equipment to apply METOLACHLOR + FOMESAFEN EC in cotton that is at least to 6 inches in height. Adjust nozzles to provide full coverage of emerged target weeds.

- **DO NOT** apply METOLACHLOR + FOMESAFEN EC later than 80 days before harvest.
- **DO NOT** apply more than 2.33 pints (1.23 lb metolachlor & 0.28 lb fomesafen a.i.) per acre per year of METOLACHLOR + FOMESAFEN EC.
- Adhere to the maximum rate that may be applied in each geographic region (See the METOLACHLOR + FOMESAFEN EC Regional Use Maps).
- Layby application is limited to 1 application per year.
- **DO NOT** mix liquid nitrogen (28% or similar) to METOLACHLOR + FOMESAFEN EC or to METOLACHLOR + FOMESAFEN EC tank mixes in cotton or injury will occur.
- Do not graze or feed forage or fodder from cotton to livestock.

## SOYBEANS

### ALL TILLAGE SYSTEMS

**Foundation Treatment for Planned Two-pass Weed Control Programs:** METOLACHLOR + FOMESAFEN EC at 2 pints per acre may be applied in conventional and glyphosate-tolerant soybeans as a preemergence application on all soils to reduce competition from weeds for a period of up to 5 weeks when followed by a planned postemergence herbicide application (See Weeds Controlled or Partially Controlled table for a complete list of weeds).

Be sure to consult the postemergence herbicide label for weeds controlled, optimum weed size, application rate, additional use directions, precautions, and limitation before use.

**Preplant Surface Applied:** METOLACHLOR + FOMESAFEN EC may be applied at 2 pints per acre prior to soybean planting only in minimum-tillage or no-tillage systems. If weeds are present at the time of treatment, apply METOLACHLOR + FOMESAFEN EC in a tank mixture with a burndown herbicide containing paraquat or glyphosate). Weed control may be lessened if treated soil is moved out of the row or if untreated soil is moved to the surface during planting. Follow with a postemergence herbicide applied at the labeled rate and within the specific growth stage for soybeans and weed spectrum.

Recommended postemergence treatments include any product or combination of products labeled to control the specific weeds remaining in the field, including glyphosate (such as Roundup) brands (for use on glyphosate-tolerant soybeans only).

**Preplant Incorporated:** Apply METOLACHLOR + FOMESAFEN EC at 2 pints per acre in conventional tillage systems where incorporation into the top 2 inches of soil occurs within 7 days after application using an implement capable of providing uniform 2-inch incorporation. Follow with a postemergence herbicide applied at the labeled rate and within the specific growth stage for soybeans and weed spectrum. Recommended postemergence treatments include any product or combination of products labeled to control the specific weeds remaining in the field, including glyphosate (for example, Roundup) brands (for use on glyphosate-tolerant soybeans only).

**Preemergence:** Apply METOLACHLOR + FOMESAFEN EC at 2 pints per acre during planting (behind the planter), or after planting, but before weeds or soybeans emerge in conventional, conservation, or no-till systems. If weeds are present at the time of treatment, apply METOLACHLOR + FOMESAFEN EC in a tank mixture with a burndown herbicide containing Paraquat or glyphosate). Follow with a postemergence herbicide applied at the labeled rate and within the specific growth stage for soybeans and weed spectrum. Recommended postemergence treatments include any product or combination of products labeled to control the specific weeds remaining in the field, including glyphosate (such as, Roundup) brands (for use on glyphosate-tolerant soybeans only).

**Replanting:** If replanting is necessary in fields previously treated with METOLACHLOR + FOMESAFEN EC, the field may be replanted to soybeans. During planting, a minimum of tillage is recommended.

### CONVENTIONAL TILLAGE SYSTEMS

METOLACHLOR + FOMESAFEN EC may be applied in conventional tillage systems either preplant incorporated or preemergence for control or partial control of the weeds (See Weeds Controlled or Partially Controlled table for a complete list of weeds). Apply METOLACHLOR + FOMESAFEN EC at the rates shown below alone, in tank mixture, or followed sequentially with postemergence herbicides to broaden the weed control spectrum or control newly emerged weeds.

**Preplant Incorporated:** Apply METOLACHLOR + FOMESAFEN EC into the top 2 inches of soil with 7 days after application and before planting using a suitable implement capable of providing uniform soil incorporation. Use this method of application especially if furrow irrigation is used or when a period of dry weather is expected after application of METOLACHLOR + FOMESAFEN EC.

**Preemergence Application:** Before weeds or soybeans emerge, apply METOLACHLOR + FOMESAFEN EC during planting (behind the planter), or after planning. Reduced effectiveness will result if dry weather follows the preemergence application of METOLACHLOR + FOMESAFEN EC. If weeds develop, shallow cultivation that will not damage the soybeans should be used to remove the weeds.

#### Use Rates for METOLACHLOR + FOMESAFEN EC in Conventional Tillage Systems (Broadcast Rates)

Soil Texture	Regions	Pints/A	
		0.5 to 3% Organic Matter	Over 3% Organic Matter
<b>COARSE</b> (Sand, loamy sand, sandy loam)	1, 2	2	2-2.25
	3	2	2-2.25
	4	2	2
<b>MEDIUM</b> (Loam, silt loam, silt)	1, 2	2.25-2.5	2.5-2.75
	3	2-2.25	2.25-2.5
	4	2	2
<b>FINE</b> (Sandy clay loam, sandy clay, silty clay, silty clay loam, clay, clay loam)	1, 2	2.75-3	2.75-3
	3	2.5 <sup>1</sup>	2.5 <sup>1</sup>
	4	2 <sup>1</sup>	2 <sup>1</sup>

<sup>1</sup> If weeds emerge before full canopy closure, apply an appropriate postemergence product.

### REDUCED TILLAGE AND NO-TILL SYSTEMS – PREPLANT

**Surface and Preemergence Application:** Apply METOLACHLOR + FOMESAFEN EC in reduced-till and no-till systems up to 15 days before planting or preemergence, but before soybean emergence. For control or partial control of the weeds listed in the Weeds Controlled or Partially Controlled table, use the high end of the rate range for applications of METOLACHLOR + FOMESAFEN EC made 15 days before planting (see table below for METOLACHLOR + FOMESAFEN EC rates). If weeds are present at time of application, burndown herbicides may be tank mixed with METOLACHLOR + FOMESAFEN EC (see Burndown Weed Control section). METOLACHLOR + FOMESAFEN EC may be followed sequentially with postemergence herbicides to broaden the weed control spectrum or control newly emerged weeds.

**Use Rates for METOLACHLOR + FOMESAFEN EC in Reduced-Till and No-Till Systems  
(Broadcast Rates)**

<b>Soil Texture</b>	<b>Regions</b>	<b>Pints/A<sup>1</sup></b>
COARSE (Sand, loamy sand, sandy loam)	1, 2	2-2.5
	3	2-2.25
	4	2 <sup>2</sup>
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1, 2	2.5-2.75
	3	2.25-2.5
	4	2 <sup>2</sup>
FINE (Sandy clay loam, sandy clay, silty clay, silty clay loam, clay, clay loam)	1, 2	2.75-3
	3	2.5 <sup>2</sup>
	4	2 <sup>2</sup>
<sup>1</sup> Use the lower rate range for soils with less than 3% organic matter. Use the higher rate range for soils with greater than 3% organic matter. <sup>2</sup> If weeds emerge before full canopy closure, apply an appropriate postemergence product.		

**BURNDOWN WEED CONTROL**

METOLACHLOR + FOMESAFEN EC can be used as part of a burndown herbicide program for control of existing vegetation prior to soybean planting and/or emergence in conservation tillage (reduced-tillage/no-till) systems. METOLACHLOR + FOMESAFEN EC may be tank mixed with herbicides containing but not limited to clethodim, metribuzin, chlorimuron ethyl, 2,4-D, tribenuron methyl, glyphosate, fluzifop-p-butyl, fenoxaprop, paraquat, sethoxydim, or saflufenacil for control of emerged weeds prior to soybean planting or crop emergence. Refer to the tank mix product labels for specific rates, use directions, precautions, restrictions and limitations.

**HERBICIDES THAT MAY BE APPLIED POSTEMERGENCE FOLLOWING METOLACHLOR + FOMESAFEN EC**

To provide additional control of certain weeds, METOLACHLOR + FOMESAFEN EC can be applied alone or in tank mixture and then followed by an application of a postemergence herbicide. Postemergence herbicides that may be applied with METOLACHLOR + FOMESAFEN EC include but are not limited to: acifluorfen, carfentrazone-ethyl, clethodim, quizalofop-p-ethyl, bentazon, chlorimuron-ethyl, lactofen, cloransulam-methyl, fluzifop-p-butyl, fenoxaprop, thifensulfuron-methyl, glufosinate, sethoxydim, imazethapyr, imazamox, imazaquin, flumiclorac-pentyl, and glyphosate,

<sup>1</sup>Use on glyphosate-tolerant soybeans only.

<sup>2</sup>Use on glufosinate-tolerant soybean only.

**POSTEMERGENCE APPLICATION**

METOLACHLOR + FOMESAFEN EC may be applied at 2 to 2.33 pints per acre as a postemergence application from cracking through the third trifoliate stage of soybeans. Necrotic spotting, bronzing, leaf crinkling or curling of soybean leaves may occur following postemergence applications, but soybeans soon outgrow these effects and develop normally. Although METOLACHLOR + FOMESAFEN EC applied alone may control or partially control certain emerged broadleaf weeds in glyphosate-tolerant soybeans, a tank mix with glyphosate may increase the spectrum of weeds controlled. Add a NIS containing at least 75% surface-active agent, at 0.25% v/v to the final spray volume if METOLACHLOR + FOMESAFEN EC is applied alone or tank mixed with glyphosate products that do not contain a built-in adjuvant.

**Precaution:** Use of a COC with METOLACHLOR + FOMESAFEN EC postemergence to soybeans could result in injury and is not advised.

**Tank Mixtures for Postemergence Applications in Soybeans:** On glyphosate-tolerant soybeans only, METOLACHLOR + FOMESAFEN EC may be tank mixed with glyphosate herbicides labeled for this use. Apply only in water as the carrier for postemergence applications.

**METOLACHLOR + FOMESAFEN EC may be tank mixed with products containing the following insecticides:**

lambda-cyhalothrin or lamda-cyhalothrin + thiamethoxam.

Refer to this label and the labels of the tank mix partners for application methods and timings, precautionary statements, restrictions, rates, and weeds or insects controlled.

**RESTRICTIONS:**

- Postemergence application is limited to 1 application per year.
- **DO NOT** apply a second application of METOLACHLOR + FOMESAFEN EC or any product that contains s- metolachlor, fomesafen, or metolachlor as crop injury may occur in harvested soybeans.
- **DO NOT** use METOLACHLOR + FOMESAFEN EC postemergence on soybeans that are under stress including but not limited to that caused by drought, insect, disease, or injury from cultivation.
- **DO NOT** exceed 2.33 pints (1.23 lb metolachlor / 0.28 lb fomesafen a.i.) per acre of METOLACHLOR + FOMESAFEN EC in a single postemergence application.
- **DO NOT** exceed 3.0 pints (1.58 lb metolachlor / 0.356 lb fomesafen a.i.) per acre of METOLACHLOR + FOMESAFEN EC per acre per year. Refer to Regional Use Map for maximum rate that may be applied within a specific region.
- **DO NOT** apply as post-emergent if a preplant surface, preplant incorporated, or pre-emergence application of S-metolachlor containing products has been applied.
- **DO NOT** graze or feed treated forage or hay from soybeans to livestock that has been treated with METOLACHLOR + FOMESAFEN EC.
- Make postemergence applications at least 90 days before harvest.

**CROP ROTATION**

**Precaution:** Do not rotate to any food or feed crops following application of METOLACHLOR + FOMESAFEN EC other than those listed in the table below or injury could result.

Time Interval Between Treatment With METOLACHLOR + FOMESAFEN EC And Planting Rotation Crops<sup>1</sup>

Crop	Months
Dry bean, Snap bean, Soybean	0
Cotton	1
Barley, Oat, Rye, Wheat	4.5
Corn <sup>2, 3</sup> , Peanut, Pea, Rice	10
Alfalfa, Sugar Beet, Sunflower, Sorghum <sup>4</sup> or any other crops	18

<sup>1</sup>Restriction: Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed. Do not graze rotated small grain crops or harvest forage or straw for livestock.

<sup>2</sup>Use a 12-month minimum rotation interval for popcorn in the states of IA, IL, IN, KY, OH and Region 4

when applied at 2.0 pints per acre or greater

<sup>3</sup>Use 18-month minimum rotation interval for sweet corn in the states of CT, MA, ME, NH, NY, RI and VT.

<sup>4</sup>Sorghum may be planted back after 10 months in Region 1 only.

## STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed, or seed by storage or disposal.

**PESTICIDE STORAGE:** Store product in original container only.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:** Nonrefillable Container (5 gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. If recycling is not available, puncture or dispose of in a sanitary landfill or incineration or other procedures approved by State and local authorities.

Nonrefillable Container (greater than five gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or other procedures approved by State and local authorities.

Refillable Container (greater than 55 gallons): Refill this container with METOLACHLOR + FOMESAFEN EC (containing the active ingredients metolachlor and fomesafen) only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For final disposal, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

### Refilling or Returning Containers

If refilling or returning container is planned, end users are not authorized to remove tamper evident cables, one-way valves or clean containers.

### Recycle or Disposal of Containers

End users are authorized to remove tamper evident cable as required to remove the product from the container unless the container is equipped with one-way valves and refilling or returning is planned. Instructions for container rinsing and either recycling or disposal are as follows:

Bottom Discharge IBC (e.g. Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the

container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g. Snyder 120 Next Gen, Bonar B120, Drums and Kegs)  
Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the container before final final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment rinsate collection system. Repeat this rinsing procedure two more times.

**SPILL, FIRE, LEAK or OTHER CHEMICAL EMERGENCY:** In case of spill or leak on floor or paved surfaces, soak up with sand earth, or synthetic absorbent. Remove to chemical waste area.

### **LIMITATION OF WARRANTY AND LIABILITY**

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES and LIMITATIONS OF LIABILITY.**

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Albaugh. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, Albaugh makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Albaugh is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Albaugh disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Albaugh's election, the replacement of product.

All product names, trademarks, and registered trademarks are the property of their respective owners.

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**LABEL HISTORY** (not part of final printed label)

File Name	Version Mark	Comment
042750-00347.20200109.REVISED_DRAFT	010920	Updated draft Section 3 application label as per EPA Request
042750-00347.20200113.MASTER	011320	SECTION 3 Approval
042750-00347.20200128.ABN Metolachlor + FSN	012820	ABN Notification
042750-00347.2020324.ABN Priority FSN	033120	ABN Notification
042750-00347.20210419.DRAFT	041921	Response to EPA Reg Review
042750-00347.20221209.DRAFT	120922	Response to EPA Reg Review
042750-00347.20221222.DRAFT	122222	Response to EPA Reg Review
042750-00347.20230109.DRAFT	010923	Response to EPA Reg Review
042750-00347.20230112.DRAFT	011223	Response to EPA Reg Review
042750-00347.20230123.DRAFT	012323	Response to EPA Reg Review